AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-2 (Canceled).

3. (Previously Presented) A method of generating a single sideband spread spectrum signal, said method comprising:

i) generating a complex spreading signal, in which the complex spreading signal is derived from a sequence defined by the equation

$$\begin{aligned} \alpha_m &= W_N^{m^2/2+qm} && N \text{ even} \\ &= W_N^{m(m+1)/2+qm} && N \text{ odd} \end{aligned}$$

where

$$W_N = e^{-i2\pi r/N}$$

m =0,1,2,..., N-1, q is any integer and the number of sequences of a given length is N;

ii) phase-shifting a complex spreading signal in accordance with a Hilbert transform to produce a phase-shifted complex spreading signal;

iii) upconverting the complex spreading signal and the phase-shifted complex spreading signal to a higher frequency to produce the single sideband spread spectrum signal;

iv) bandlimiting one of at least the complex spreading signal or the single sideband spread spectrum signal; and

v) modulating one of the complex spreading signal or the single sideband spread spectrum signal with an input data signal,

wherein the order in which steps ii) to v) are performed is immaterial provided that the phase shifting step is performed before the upconversion step.

4. (Currently Amended) A method according to claim 3 ~~1~~ in which the bandlimiting step is performed prior to the phase shifting step.

5. (Currently Amended) A method according to claim 3 ~~1~~ in which the bandlimiting step is performed after the upconversion step.

6. (Currently Amended) A method according to claim 3 ~~1~~ in which the modulation step is performed after the upconversion step.

Claims 7-11 (Canceled).

12. (Previously Presented) A method of decoding a single sideband spread spectrum signal, said method comprising:

upconverting a complex spreading signal to a higher frequency, in which the complex spreading signal is derived from a sequence defined by the equation

$$\begin{aligned} \alpha_m &= W_N^{m^2/2+qm} && N \text{ even} \\ &= W_N^{m(m+1)/2+qm} && N \text{ odd} \end{aligned}$$

where

$W_N = e^{-i2\pi r / N}$

m = 0,1,2,..., N-1, q is any integer and the number of sequences of a given length being N, and

demodulating a received signal in accordance with the upconverted complex spreading signal.

Claim 13 (Canceled).